1   19.   A system for generalizing a set of atomics and/or groups in a hierarchical document

2   structure, the system comprising:

3   means for identifying an anchor node, the anchor node being a context node of a template for

4   a particular node of content;

5   means for identifying an anchor node parent with sibling case where particular nodes of

6   content share the same anchor node and the path expressions for each particular node of content are

7   the same as the anchor node;

8   means for determining the anchors if the anchor node parent with sibling case is identified;

9   means for combining the location expressions of the identified nodes of content into a single

10   location expression for a generalized anchor node;

11   means for determining if the generalized anchor node is a sibling; and

12   means for generating a generalized expression corresponding to the generalized anchor node

13   that locates the content in the particular nodes of content identified.

1   20.   The system of Claim 19 further comprising means for reanchoring the particular

2   nodes of content to a reanchor node if the generalized anchor node is a sibling node and means for

3   determining if the reanchor node is tangled such that the location expression to a piece of content

4   matches more than one piece of content.

1   21.   The system of Claim 19 further comprising means for identifying the lowest node in

2   the hierarchical document structure that has not been generalized and means for generalizing the

3   lowest node before generalizing the nodes that are higher in the hierarchical document structure.

1   22.   The system of Claim 19, wherein the location expression combining means further

2   comprises means for identifying a location expression for each particular node of content, means for

3   determining if there are other nodes of content and means for generating a replacement anchor node

4   if there are no other nodes of content.

1   23.   The system of Claim 22, wherein the location expression combining means further

2   comprises means for determining if the location expression for the other nodes of content have been

3   generalized, means for generalizing the location expressions of the other nodes of content if they

4   have not been previously generalized and means for identifying the previously generalized location

5   expressions.

1   24.   The system of Claim 23, wherein the location expression combining means further

2   comprises means for determining if the code associated with the location expression are consistent

3   with each other, means for generalizing each element of a location expression if the code is not

4   consistent and means for generalizing the common elements in the path if the code is consistent.

1   25.   The system of Claim 20, wherein the means for determining a tangled node further

2   comprises means for determining the anchor nodes in the hierarchical document structure and means

3   for generating replacement nodes for location expressions having the same number of elements if

4   there are no more anchor nodes.

1   26.   The system of Claim 25, wherein the means for determining a tangled node further

2   comprises means for determining the number of elements in each location expression and means for

3   indexing each location expression according to location, anchor number and element number.

1   27.   A method for generalizing a set of atomics and/or groups in a hierarchical document

2   structure, the method comprising:

3   identifying an anchor node, the anchor node being a context node of a template for a

4   particular node of content;

5   identifying an anchor node parent with sibling case where particular nodes of content share

6   the same anchor node and the path expressions for each particular node of content are the same as

7   the anchor node;

8   determining the anchors if the anchor node parent with sibling case is identified;

9   combining the location expressions of the identified nodes of content into a single location

10   expression for a generalized anchor node;

11   determining if the generalized anchor node is a sibling; and

12   generating a generalized expression corresponding to the generalized anchor node that locates

13   the content in the particular nodes of content identified.

1   28.   The method of Claim 27 further comprising reanchoring the particular nodes of

2   content to a reanchor node if the generalized anchor node is a sibling node and determining if the

3   reanchor node is tangled such that the location expression to a piece of content matches more than

4   one piece of content.

1   29.   The method of Claim 27 further comprising identifying the lowest node in the

2   hierarchical document structure that has not been generalized and generalizing the lowest node

3   before generalizing the nodes that are higher in the hierarchical document structure.

1   30.   The method of Claim 27, wherein the location expression combining further

2   comprises identifying a location expression for each particular node of content, determining if there

3   are other nodes of content and generating a replacement anchor node if there are no other nodes of

4   content.

1   31.   The method of Claim 30, wherein the location expression combining further

2   comprises determining if the location expression for the other nodes of content have been

3   generalized, generalizing the location expressions of the other nodes of content if they have not been

4   previously generalized and identifying the previously generalized location expressions.

1   32.   The method of Claim 31, wherein the location expression combining further

2   comprises determining if the code associated with the location expression are consistent with each

3   other, generalizing each element of a location expression if the code is not consistent and

4   generalizing the common elements in the path if the code is consistent.

1   33.   The method of Claim 28, wherein determining a tangled node further comprises

2   determining the anchor nodes in the hierarchical document structure and generating replacement

3   nodes for location expressions having the same number of elements if there are no more anchor

4   nodes.

1   34.   The method of Claim 33, wherein the determining a tangled node further comprises

2   determining the number of elements in each location expression and indexing each location

3   expression according to location, anchor number and element number.

1   35.   A system for generalizing a set of atomics and/or groups in a hierarchical document

2   structure, the system comprising:

3   means for identifying an anchor node, the anchor node being a context XHTML node of the

4   XSL template for a particular RML node;

5   means for identifying an anchor node parent with sibling delimiters where, each item shares

6   the same parent;

7   means for identifying an anchor node sibling where, each individual area of generalized

8   structure is not capable of being contained underneath its own unique ancestor node;